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SECTION III.

AUTOMATION IN LOT PRODUCTION BASED ON THE
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VK/pw/mas
10-25-60

BLYUMBERG, V.A.; SERGEYEV, M.A.; KROPIVNITSKIY, N.N., inzh., retsenzent;
LIBKIND, M.M., inzh., retsenzent; BARSKIY, M.M., inzh., red.;
VARKOVETSKAYA, A.I., red.izd-va; SPERANSKAYA, O.V., tekhn.red.;
DLUGOKANSKAYA, Ye.A., tekhn.red.

[Operator of boring and turning lathes] Tokar'-karusel'shchik.
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959.
422 p.

(MIRA 12:11)

(Lathes)

25(5)

SOV/117-59-4-2/36

AUTHORS: Barskiy, M.E., Blyumberg, V.A., Gushchin, V.F.,
and Kucher, I.M., Engineers.

TITLE: The Automation of Machining in Small-Lot Production
by the Use of Hydro-Tool Rests.

PERIODICAL: Mashinostroitel', 1959, Nr 4, pp 3-8 (USSR)

ABSTRACT: The authors treat the problems discussed at a
special conference on the matter of application of hy-
draulic tracer tool rests ("GS-1" and KST-1") for
machine tools employed in the small-lot machining of
complex staged or otherwise shaped machine parts. The
conference convened from 23 to 27 March and was or-
ganized by the Leningrad NTO MASHPROM board. Auto-
mation with the subject tool rests would greatly
raise the rate of machining (25-50% and in some cases
much more), and they are very well applicable for lathes,
but cannot be used without some additional equipment

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The Automation of Machining in Small-Lot Production by the Use of Hydro-Tool Rests.

(Like driver centers, floating centers, pneumatic cylinders, special mandrels, etc.). Some conventional machine part designs would have to be slightly changed, and the application is not clearly commercial in all possible cases, for the time gain can be obtained on the account of auxiliary machine tool work, while the cutting process itself is not speeded up but becomes somewhat slower. The article describes a driver center (Figure 2) used at the Leningradskiy stanko-stroitel'nyy zavod im. Sverdlova (Leningrad Machine Tool Plant imeni Sverdlov); the tracers in use (Figure 4); the conclusions of the Leningradskiy inzhenerno-ekonomicheskiy institut, "LIEI", (Leningrad Engineering-Economic Institute) made after a study of the commerciability of the tool rests, and recommendations

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The Automation of Machining in Small-Lot Production by the Use of Hydro-Tool Rests.

concerning details of the machining process with the use of the hydro-tool rests. Design changes needed for the application of the hydro-tool rests will be described in the next issue of this periodical. There are 5 diagrams, 2 graphs, 1 table and 1 Soviet reference.

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25(7)

SOV/117-59-5-4/30

AUTHORS: Barskiy, M.E., Blyumberg, V.A., Gushohin, V.F., and Kucher, I. M., Engineers

TITLE: The Automation of Machining in Small-Scale Production by Using Hydraulic Slide-Rests

PERIODICAL: Mashinostroitel', 1959, Nr 5, pp 7-12 (USSR)

ABSTRACT: This is the second part of an article (see the beginning in "Mashinostroitel'", 1959, Nr 4). This chapter lists improvements of hydraulic slide-rests, introduced at the Leningradskiy zavod "Bol'shevik" (Leningrad "Bol'shevik" Plant), the Leningradskiy zavod imeni Kirova (Leningrad Plant imeni Kirov) and others. The following are listed: an attachment for multi-pass operations with the "GS-1" slide-rest (Figure 1); a similar attachment for the "KST-1" slide-rest (Figure 2); stops, limiting the slide-rest travel from left to right, and on the copying motion guides toward the centers axis (Figures 3, 4). These stops eliminate time waste and prevent the breakage of cutting tools. It is mentioned that the "GS-1" gives only a

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low-diameter accuracy of work (frequently even below the 5th "OST" accuracy class), the reason being the changing temperature of the hydraulic oil during the first 2-3 hours of operation or after stoppages. But the "KST-1" and "UP-240" achieve an accuracy of "3 a" class in a stable work process. The linear dimensions are not affected by oil temperature changes. The Leningradskiy inzhenerno-ekonomicheskii institut (Leningrad Institute of Economic Engineering) stated that a static error in the follow-up system causes a systematical error of 0.03 to 0.1 mm in the linear dimensions of all hydraulic slide-rests. The causes of the low rigidity of the "GS-1" were investigated with the use of indicators placed as shown in Figure 6. The results are specified. Detailed information is given on a new hydraulic slide-rest type "GIZ-1", designed by V.F. Gushchin and built at the Izhorskiy mashinostroitel'nyy zavod (Izhorskiy Machine Building Plant), for use on the "1K62" lathe (Figure 7). The outstanding features of the "GIZ-1" are given. 1) It is attached directly to the cross-slide, on

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The Automation of Machining in Small-Scale Production by Using Hydraulic Slide-Rests

the rear; it is small and its center of gravity is so placed that the slide cannot shift. 2) It may be used with a circular as well as with a flat tracer and the work edge of the feeler is approximately at the center of the possible swing of the slide, so that no shifts of the follow-up displacements are possible if the slide shifts. 3) The hydraulic slide is a massive round bar and the cutting tool is attached to its body. The bar is at the same time a hydraulic cylinder, which displaces in relation to a fixed piston. It is provided with a separate aperture for attaching boring bars. 4) The hydraulic system is exactly the same as in the "KST-1" and "GS-1" hydraulic slide-rests. At the Leningrad "Bcl'-shevik" Plant, the lathe operator V.N. Trutnev developed a hydraulic slide-rest for the "1A62" lathe. The particular feature of this slide-rest is the absence of a separate motor for the drive of the hydraulic pump. It is being used for machining external complex surfaces, as well as internal complex surfaces (stepped or otherwise shaped) (Figures 8,9).

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The Automation of Machining in Small-Scale Production by Using Hydraulic Slide-Rests.

Recommendations are included for designing hydraulic slide-rests. There are 10 sets of diagrams, 1 table, and 1 Soviet reference.

Card 4/4

ANDREYEV, N.F., kand. tekhn. nauk; ELYUMBERG, V.A., inzh.; SHATS, Ye.L.,
kand. tekhn. nauk

Organizing the maintenance and repair of electric equipment in
agriculture; Mekh. i elek. sets. sel'khoz. 17 no.2:38-39 '59.
(MIRA 12:6)

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institut (for Andreyev, Elyumberg). 2. Vsesoyuznyy nauchno-issledovatel'skiy
institut elektrifikatsii sel'skogo khozyaystva (for Shats).
(Electric machinery--Maintenance and repair)

TERENT'YEV, Ivan Stepanovich; ZAZERSKIY, Ye.I., inzh., retsenzent;
ELYUMBEG, V.A., kand.tekhn.nauk, red.; VARKOVETSKAYA, A.I.,
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[Drilling machines and their operation] Sverlil'nye stanki i
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lit-ry, 1960. 206 p. (MIRA 13:9)
(Drilling and boring machinery)

BLUMBERG, V.A.

TABLE I BOOK EXAMINATION 807/4501 Language. <i>Intermedial-linguistic Institute</i> <i>Chislovnyy dictionar i slovarnyy posredstvo (Prilozheniya i Slovarnyy posredstvo) (Leningrad: Intermedial, 1960, 268 p.)</i> <i>(Series: Izy. Tudy, v. 30) 1,833 copies printed.</i> 24. (Title page): A.A. Metelits, Professor; Ed. (Inside book): O.K. Aron; Tech. Ed.: S.D. Vokologina. FOREWORD. This collection of articles is intended for technical personnel in the machine-building industry and for students in schools of higher technical education. CONTENTS. The collection contains articles on the problems of developing methods for mechanical machining (such as grinding and superfinishing with struts hardening, roll burnishing, flame grinding, etc.) which would serve to increase the life of machine parts exposed to friction and wear, and thereby insure high productivity and economy. Methods for determining residual stresses (only in microtensile and microtensile) are discussed in detail. Also considered are the possibility of using hydraulically actuated slide rests in lathe production, the use of the group measuring method, and an attachment for program control of an existing lathe for the production of a single-coordinate system of the lathe. A description of advanced production methods and the possibilities of their use in the German Democratic Republic is presented. 80 personalities are mentioned. References accompany most of the articles. Implementation, or: In. Measures of Production Grinding of Parts With the Wheel 47 Gluzhin, I.I., Doctor of Technical Sciences, Professor. Method of Determining Residual Stresses 48 PART II. MODERN METHODS OF THE APPLICATION OF MECHANICAL MACHINING 49 IN LATHE PRODUCTION 49 Trubnikov, V.A., Candidate of Technical Sciences, Doctor. Problems of Labor Productivity and Efficiency in the Application of Hydraulic Slide Rests 49 Metelits, A.A., Engineer. 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ADVANCED MANUFACTURING METHODS 141 IN PLANTS OF THE GERMAN DEMOCRATIC REPUBLIC 141 Metelits, A.A., Preparation for Production and Some Problems of Planning and Organization of Production in Plants of the German Democratic Republic 190 Metelits, A.A., Advanced Production Methods in the Industry of the German Democratic Republic 216 AVAILABLE: Library of Congress Classification: 62-10-60 W/rev/eng 11-16-60	TABLE I BOOK EXAMINATION 807/4501 Language. <i>Intermedial-linguistic Institute</i> <i>Chislovnyy dictionar i slovarnyy posredstvo (Prilozheniya i Slovarnyy posredstvo) (Leningrad: Intermedial, 1960, 268 p.)</i> <i>(Series: Izy. Tudy, v. 30) 1,833 copies printed.</i> 24. (Title page): A.A. Metelits, Professor; Ed. (Inside book): O.K. Aron; Tech. Ed.: S.D. Vokologina. FOREWORD. This collection of articles is intended for technical personnel in the machine-building industry and for students in schools of higher technical education. CONTENTS. The collection contains articles on the problems of developing methods for mechanical machining (such as grinding and superfinishing with struts hardening, roll burnishing, flame grinding, etc.) which would serve to increase the life of machine parts exposed to friction and wear, and thereby insure high productivity and economy. Methods for determining residual stresses (only in microtensile and microtensile) are discussed in detail. Also considered are the possibility of using hydraulically actuated slide rests in lathe production, the use of the group measuring method, and an attachment for program control of an existing lathe for the production of a single-coordinate system of the lathe. A description of advanced production methods and the possibilities of their use in the German Democratic Republic is presented. 80 personalities are mentioned. References accompany most of the articles. Implementation, or: In. Measures of Production Grinding of Parts With the Wheel 47 Gluzhin, I.I., Doctor of Technical Sciences, Professor. Method of Determining Residual Stresses 48 PART II. MODERN METHODS OF THE APPLICATION OF MECHANICAL MACHINING 49 IN LATHE PRODUCTION 49 Trubnikov, V.A., Candidate of Technical Sciences, Doctor. Problems of Labor Productivity and Efficiency in the Application of Hydraulic Slide Rests 49 Metelits, A.A., Engineer. Accuracy of Machining on Lathes With a Hydraulic Slide Rest 125 Gluzhin, I.I., Engineer. Experience Gained in Preparation for Manufacture of Parts by Using Machining Methods at the "Intermedial" Plant 137 Gluzhin, I.I., Candidate of Technical Sciences, Doctor. Analysis of Performance of a Single-Coordinate System of Program Control of a Lathe (With Illustrations) 139 Trubnikov, V.A., Candidate of Technical Sciences, Doctor. Analysis of Performance of a Single-Coordinate System of Program Control of a Lathe Application 141 PART III. 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PUGACHEVA, Raisa Viktorovna; SHORNIKOV, Petr Nikolayevich;
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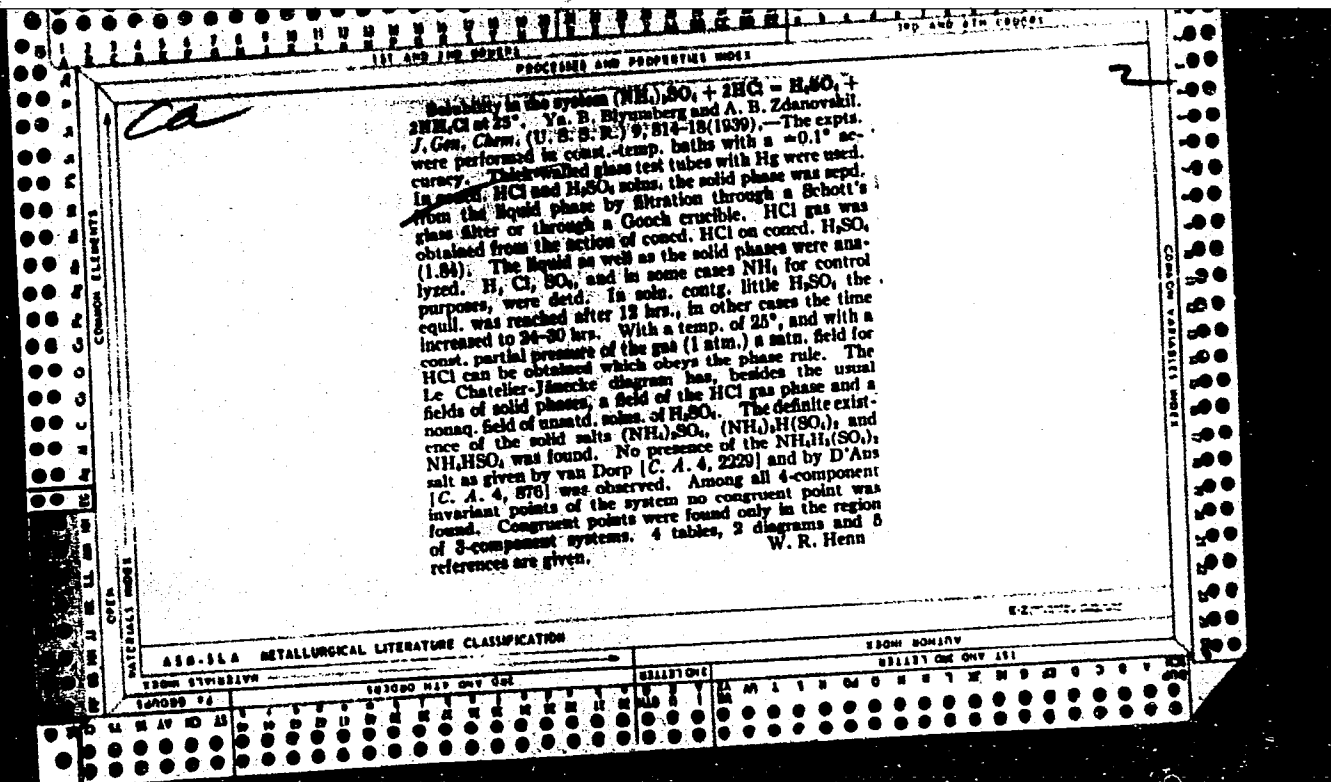
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PROCESSOR AND PROPERTY INDEX																			
CA										18									
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ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
FROM SYMBOL										FROM SYMBOL									
SYMBOL										SYMBOL									

PROCESSING AND PROPERTIES INDEX									
1ST AND 2ND ORDERS					3RD AND 4TH ORDERS				
<i>CA</i> The concentration of salts in Karabogaz Bay. Ya. H. Ilyumzhinov. Byull. Inst. Halurgii 1939, No. 2-1-100. <i>Amer. Refurat. Zhur.</i> 1939, No. 6, 24.—Owing to a considerable decrease of the level of the Caspian Sea, a sharp increase of brine concn. took place. A relation between the coeff. of metamorphosis and the total concn. of salts, during which a concn. of NaCl takes place, was found. The pptn. of NaCl begins at a concn. of 27.0 g/l. and at a coeff. of metamorphization of 3.19-4.00. From the concn.-coeff. of metamorphosis diagrams obtained a considerable break is observed between the wptn. of the salts and the soln. of mirabilite, which points to a considerable influence of the evapn. factor on the increase of concn. of the brine in the bay. From the calcul. units. of the wptn. of mirabilite in 1939, it is concluded that decrease of the level of the Caspian Sea will cause a new phase reaction of the deposition of NaCl. W. R. Henn									
ASAC-11A METALLURGICAL LITERATURE CLASSIFICATION EXTRACTED FROM 1939-1940 1939-1940 1939-1940									



Cd

PROCESSES AND PROPERTIES INDEX

18

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Chemical Abst.
Vol. 48 No. 9
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Acids, Alkalies, Salts,
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①
The complexity of exploitation of salt brine from Karabogaz-gol. *Va. B. Blyumberg. Khim. Prom. 1947, 192-5.*—
The recovery of Glauber salt from the brine of the gulf of Karabogaz had been a simple matter up to 1939: satn. in the summer and crystn. in the winter. Since then the concn. of the brine increased annually, a phenomenon assocd. with the intensified sinking of the Caspian Sea first noted in 1934, and at first NaCl and later $MgSO_4 \cdot 7H_2O$ crystd. out with $Na_2SO_4 \cdot 10H_2O$. On the basis of phase-rule relations and large-scale experience in the area the following process is suggested: The brine from the gulf is pumped to basin (1) where it is concd.; the mother liquor is pumped to basin (2) where $MgCl_2 \cdot 6H_2O$ and Br_2 are recovered and the cryst. mat in (1) is dissolved in water from the Caspian Sea, a distance of 12 km. This soln. is then pumped into a series of 3 basins. In the first pure Glauber salt is recovered at the rate of 250 kg./cu. m.; in the second, NaCl is crystd. out; in the third $MgSO_4 \cdot 7H_2O$. Hot summers and cold winters provide the thermal energy. Lakes in the vicinity serve as basins. The details are given diagrammatically.
I. Bencowitz

BLYUMBERG, Ya. B.

USSR/Chemistry - Sodium Sulfate Production

FD 192

Card 1/1

Author : Blyumberg, Ya. B., Candidate of Technical Sciences

Title : Production of sodium sulfate from sea water

Periodical : Khim. prom. 4, 17-21 (209-213), June 1954

Abstract : On the basis of experimental data taken from various sources, discusses the conditions under which sodium sulfate can be obtained by the natural evaporation of the waters of Lake Balkhash, the Caspian Sea, and the Aral Sea. Finds that although mirabilite can be obtained directly from naturally evaporated water of Lake Balkhash, more water will have to be evaporated than in production based on water of the Caspian Sea or the Aral Sea. States that sodium sulfate can be also produced from Black Sea and Sivash naturally evaporated brines, in combination with magnesium salts production, if these brines are artificially cooled to minus 10 . Five USSR references, two since 1940. Three graphs and eight tables.

~~BLYUMBERG, YA. B.~~

USSR/Chemistry - Magnesium, Potassium, Bromine

FD-873

Card 1/1 Pub.50 - 6/24

Author : Blyumberg, Ya. B., Cand Tech Sci

Title : Concerning the evaporation of the brines of Kara-Bogaz-Gol

Periodical : Khim, prom., No 6, 342-344 (22-24), Sep 1954

Abstract : On the basis of data obtained by the evaporation of Kara-Bogaz-Gol brines under various natural and experimental conditions, discusses the separation of magnesium sulfate, bischofite, and carnallite from these brines, changes in the concentration of bromine, etc. Represents the results in the form of phase diagrams. One reference (USSR). Four graphs, 5 tables.

Institution :

Submitted :

The glauconite pulp was enriched with fresh soda, A which was then recycled together with soda to the 1st step. Most of the glauconite was converted to eq. KCl to K_2SO_4 and soda A. The consumption was 1.5 tons mirabilite and 0.57 ton KCl per ton of glauconite. The overall recovery of K_2SO_4 was 98.5%.

F. M. BIKIN

4 YUMBERG, Y.B.

20-5-26/60

AUTHOR	BLYUMBERG Ya.B.
TITLE	On the Precipitation of Halite in Karabogaz -Gol. (O sadke galita v Karabogaz-Gole -Russian)
PERIODICAL	Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 5, pp 1012-1013 (U.S.S.R.)
ABSTRACT	The present paper imparts information which characterizes the chemical composition of salt-water in the above-mentioned gulf in the moment when it is saturated by halite. As is known the year 1939 was critical for the life of the Karabogaz-Gol: constant increase in the concentration of salt led to precipitation of halite as a solid ground phase. This started everywhere toward the beginning of August and was so acute that propellers of ships were rapidly covered by a thick crust of salt. The salt-water analysis gave a salt content of 28.5% at ~9.7 NaCl. The water composition was the same in all depths. The crystals lifted from the bottom of the sea contained rhombic dipyrramids. Their optical constants left no doubt that they consisted of tenardit. The crystal crust from the bottom of the sea consisted of small cemented grains of tenardit with a small inclusion of very fine-grained calcite. The formation of tenardit was a consequence of the mirabolit dehydration caused by favourable temperature. (1 fig., 2 tabl., 4 Slavic references).
ASSOCIATION	Not Given.
PRESENTED BY	URAZOV G.G., Member of the Academy
SUBMITTED	12.11.1956
AVAILABLE	Library of Congress.
Card 1/1	

AUTHORS: Blyumberg, Ya. B., Mironova, N. Ya. SOV/50-58-9-10/12

TITLE: On the Transparency of the Natural Brine Solution of the Gulf of Kara-Bogaz-Gol (O prozrachnosti rapy zaliva Kara-Bogaz-Gol)

PERIODICAL: Meteorologiya i gidrologiya, 1958, Nr 9, pp. 34-35 (USSR)

ABSTRACT: The transparency of the brine solution of the gulf mentioned in the title is most peculiar; other of its hydrochemical properties are equally strange. A historical survey of transparency observations is given (refs 2, 3). The transparency was 1,8 m in 1897, and 1,4 m in 1934. It eventually decreased: 0,25 - 0,30 m in 1958. It thus sank by the sixfold within 41 years. Total salinity increased simultaneously: from 16,4 ‰ in 1897 to 28 ‰ in 1938. Since 1947, the ekspeditsiya Instituta obshchey i neorganicheskoy khimii AN SSSR (= IONKh) (Expedition of the Institute of General and Inorganic Chemistry at the AS USSR) has been working here. In 1947, V. G. Polyakov determined the transparency of the brine solution to be between 0,8 and 1,5 m. In 1950, hydrological work was conducted here by the team of the Institut okeanologii AN SSSR (Institute of Oceanography of the AS USSR). By 1950, an abrupt change in

Card 1/5

On the Transparency of the Natural Brine Solution of the Gulf of Kara-Bogaz-Gol

SOV/50-55-9-10/19

the hydrological and hydrochemical conditions in the above-mentioned gulf had occurred. A considerable rise in the total saline concentration can be noticed; it amounted to 30 ‰. Transparency had risen to 1,8 m (Fig 1). In the years 1934-1935, the Karabogazskaya gidrokhimicheskaya ekspeditsiya Vsesoyuznogo instituta galurgii (Hydrochemical Kara-Bogaz Expedition of the All-Union Institute of Metallurgy) found that besides the crystallization of Glauber salts, increased gypsum precipitation occurs when the temperatures are lowered. Thus the brine solution is rendered more transparent, as gypsum forms a suspension together with other mineral and organic particles (Ref 1). The transparency values of the brine solution were subject to the general physico-chemical processes taking place in the gulf (Fig 2). Besides gypsum, individual interspersed dolomite and calcite crystals (determined by S. Kurbatov, Assistant at the Department of Mineralogy) were found. With an increased concentration of magnesium salts in natural brine solutions of the chloride sulfate type, gypsum solubility is reduced. In 1950, the brine solution contained almost no gypsum at all. The color changed from milky grey to a reddish pink. In the years 1953-1956, red, light blue,

Card 2/3

SOV/50-58-9-10/19
On the Transparency of the Natural Brine Solution of the Gulf of Kara-Bogaz-
Gol:

and other shades were observed. There are 2 figures and 3
references, all of which are Soviet.

Card 3/3

ELYUMBERG, Ya. B.

Water of the Caspian Sea as a source of raw material for sodium sulfate production. Trudy Okean. kom. 5:290-294 '59.

(Caspian Sea--Glauber's salt)

(MIRA 13:6)

BLYUMBERG, Ya.B.

Production of epsomite natural magnesium sulfate. Khim.prom.
no.7:605-608 O-N '59. (MIRA 13:5)
(Magnesium sulfate)

BLYUMBERG, Ya.B., kand.tekhn.nauk; MIKHAYLIN, A.D., kand.khim.nauk; REMEN, R.Ye.,
kand.khim.nauk

Articles on mineral fertilizers. Priroda 53 no.1:66-72 '64.
(MIRA 17:2)

BLYUMEL', N.F.

KAL'MANOVICH, B.L.; BLYUMEL', N.F.; GIRSHIK, B.I.; IRTLACH, B.I.

Effectiveness of immunization against dysentery in school children.
Pediatria no.4:30-32 J1-Ag '54. (MLRA 7:10)

1. Iz kafedry epidemiologii (zav. prof. L.Ya.Kats-Chernokhvostova)
I Moskovskogo ordena Lenina meditsinskogo instituta i rayonnykh
sanitarno-epidemiologicheskikh stantsiy
(DYSENTERY, BACILLARY, in infant and child,
vacc., results in school child.)
(VACCINES AND VACCINATION,
dysentery, bacillary, results in school child.)

BELIKOVA, V.D., kandidat meditsinskikh nauk; BLYUMEL', N.F.; MITROFANOVA, Ye.B.; SOLOV'YEVA, N.A.; DOVZHIK, R.M.

Effect of sanitary conditions on dysenterial reinfection in special nurseries. Gig. i san. 21 no.6:48-51 Je '56. (MLRA 9:8)

1. Iz kafedry epid. I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(DYSENTERY, BACILLARY, in infant and child, reinfect. in nurseries (Rus))

BELIKOVA-ALDAKOVA, V.D.; BLYUMEL', N.F.; MITROFANOVA, Ye.V.; SOLOV'YEVA, N.A.

Some data on the nature of atypical strains of Shigella.
Zhur.mikrobiol.epid. i immun. 30 no.4:94-97 Ap '59.

(MIRA 12:6)

1. Iz kafedry epidemiologii II Moskovskogo meditsinskogo
instituta imeni Sechenova.

(SHIGELLA

atypical strains (Rus))

BELIKOVA-ALDAKOVA, V.D.; BLYUMEL', N.F.; ZHARIKOVA, A.D.; PERFIL'YEVA,
Ye.B.; SOLOV'YEVA, N.A.

Causes reducing vaccinal immunity to diphtheria. Zhur.mikrobiol.
epid. i immun. 32 no.4:14-19 Ap '61. (MIRA 14:6)

1. Iz kafedry epidemiologii I Moskovskogo ordena Lenina meditsin-
skogo instituta imeni Sechenova.
(DIPHTHERIA)

1ST AND 2ND LETTER

2ND AND 4TH LETTER

1ST AND 2ND LETTER

2ND AND 4TH LETTER

BYRONOV, L. M. THEORY OF FIRING REFRACTORIES.
Oskrebnyy, 3 (8) 611-15 (1935). Conclusions of Russian
writers on the firing of refractories are criticized.

Lead-free glass. I. M. Il'yumen. Russ. ZI, 347, May 31, 1938. A low-melting glass with low expansion coeff. is obtained from SiO₂ 66-62.5, Al₂O₃ 5.5-8, P₂O₅ up to 5, B₂O₃ up to 4, CaO 4-6.5, MgO 1.5-3, BaO 4-8 and Na₂O-K₂O 10-13%.

1ST AND 2ND ORDERS		PROCESSING AND PROPERTIES INDEX	
Alkali-resistant grog refractories. L. M. Myumen. <i>Acad. i Steble 14, No. 6, 27-30 (1938).</i>—Rpts. showed that: refractories manufd. from grog fired at low temps. are more resistant to alkalis and glass; feldspar has a favorable effect only when grog fired at high temps. is used; grog bodies of a greater basicity and alklna. of corundum are considerably less resistant than more acid bodies. M. V. Condoide			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION			
1ST ORDER		2ND ORDER	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESS AND PROPERTIES INDEX																																																			
CA 19 Use of heavy spar for introducing barium oxide into glass. L. M. Myrman. <i>Sovetskoye Prosv.</i> 16, No. 11, N 10 (1968). Large deposits of BaSO_4 are found in Russia but there is little BaCO_3. Glasses were melted without difficulty and easily refined, and no traces of devitrification were found. These glasses are softer than ordinary lime glasses and therefore are more easily worked. They also have a good luster, but are difficult to decolorize. M. V. C.																																																			
ASR-55A METALLURGICAL LITERATURE CLASSIFICATION																																																			
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1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
CA Milky flash glass on an apatite base. L. M. Blynnick. <i>Stokhays Prom</i>, 18, No. 6, 21(1934).—Attempts to use Mormon apatite contg. about 40% P_2O_5 and only 1% P_2O_5 for opacification are discussed. The chem. compos. of glasses produced are given in a table. M. V. C.																			
ASB. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION																			

A.C.S.

Structural Clay Products

Chemical method of rendering harmless lime pebbles in
clay masses. L. M. Byrnes. *Keramik*, 1939, No. 10,
pp. 33-37; *Chem. Abstr.*, 34, 8194 (1940).—Lime contained
in clay is converted to silicate by adding 0.7 to 1.0% NaCl
to the batch; thus good brick is produced even with CaCO₃
up to 1.5%.

TITLE AND SUBJECT		PRECEDENCE AND PRIORITY		JOB AND JOB NUMBER	
C A				2	
NaCl as a medium for reactions of silicate formation in the solid phase. <i>J. Applied Chem.</i> (U. S. S. R. transl. of 1958) (French summary).—In lab. work, NaCl was used as a medium for the reaction of CaO with silicates, aluminates and aluminates at relatively low temperatures (up to 1000°C). NaCl acts as a medium for the reaction of $3\text{CaO} \cdot \text{SiO}_2$ and $3\text{CaO} \cdot \text{Al}_2\text{O}_3$ at temps. of the order of 1000°, although in portland cement clinkers these form only at much higher temps. NaCl is an effective means of combating lime-like inclusions in structural bricks. O. M. Kosolapoff					
ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION					
SOURCE SYNDICATE		SOURCE SYNDICATE		SOURCE SYNDICATE	
LONDON		LONDON		LONDON	

BLYUMEN, L. M. Prof. Cand. Chem. Sci.

"Electron Level of Sterol Molecules and General Methods for Obtaining
Secular Equations," Zhur. eksper. i teoret. fiz., 18, No.9, 1948

BLYUMEN, L. M.

29082. - BLYUMEN, L. M. I BUDNIKOV, P. P. -- K voprosu o steklokeramike. (V svyazi so stat'ey V. V. Goncharova "O steklokeramike kak ognepurnom materiale" v zhurn. "Ogneupory", 1949, No. 4). Ogneupory, 1949, No. 9, s. 393-97. -- Bibliogr: 9 nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

BLYUMEN, L. M.

35324. Voprou O Fiziko-Khimicheskoy Prirode Spekaniya Keramicheskikh Materialov. Trudy Mosk. Khim. -Tekhol. In-Ta Im. Mendeleeva, Vyp.16, 1949, S. 73-86.- Bibliogr: 15 Nazv.

SO: Letopis'Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

the zinc system ZnO-TiO₂, both in the thermally-stable
samples and from crystals of a metal, a single crystal of ZnO
has been formed. This is a first step in the synthesis of a
single crystal of ZnO.

BEYUMEN, L. M.
Pavlovskaya, L. M. Processes occurring in the contact-
metamorphic zone. (L. M. Beyumen, Izvest. Akad. Nauk
Turkmen. S.S.R. 1953, No. 3, 66-74; Referat. Zhur.,
Khim. 1953, No. 9349.—An attempt is made to discover a
math. expression for the stresses which take place between a
body and the glass coating. Processes are discussed
which occur during the formation of an intermediate layer,
designated by II, as being contact-metamorphic. The role
that the wetting capacity of the glass plays in the formation
of the intermediate layer is noted. Marjorie Ketner

Distr: 4E43/4E20 27

✓Phase composition of iron oxides in the presence of fused silicates; L. M. Blyumen. *Izv. Akad. Nauk Turkm.* S.S.R. 1954, No. 1, 88-72; *Referat. Zhur. Khim.* 1956 Abstr. No. 16786.—The behavior on heating was investigated of both pure Fe oxides and their mixts. with silicates. The starting materials were Fe(OH)₃ and damp porcelain glazing. Thoroughly pulverized materials were compressed to form disks 50 mm. in diam. and 5 mm. in thickness and calcined at 1200-300° in a weak oxidizing or reducing medium. The obtained products were analyzed by chem., x-ray, and microscopic methods. It was established that pure Fe oxides form at 1200-300°, independently from the conditions of calcination, only one phase α-Fe₂O₃ (hematite). In presence of silicates at 1200°, even in an oxidizing medium, disaccn. of hematite begins with the formation of magnetite. The spinel phase in mixts. of Fe oxides and silicates is apparently a solid soln. of magnetite and γ-Fe₂O₃.

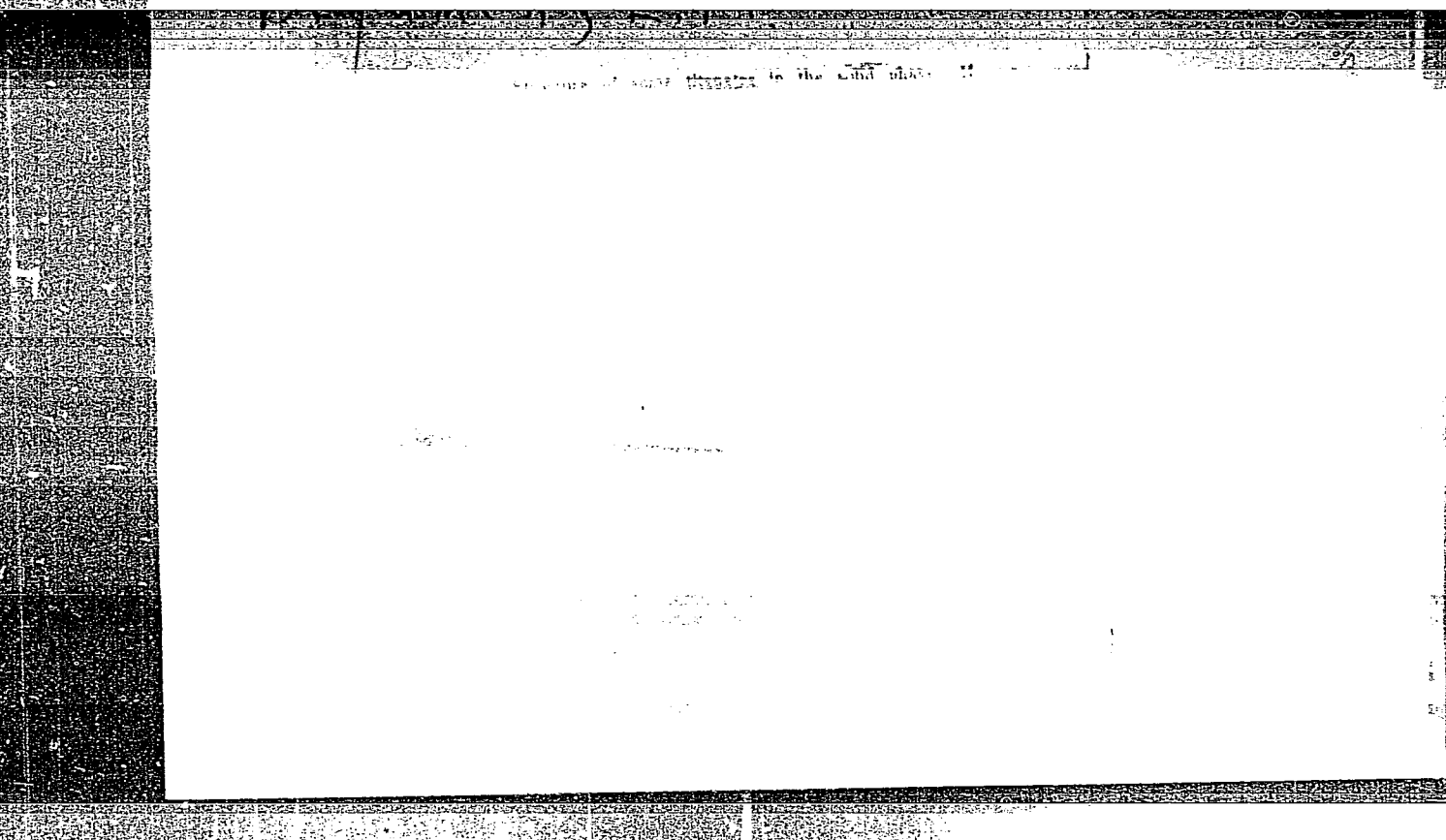
J. Altszents

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БЛЮМЕН Л.М.

324. The influence of glazes on the mechanical strength and thermal stability of ceramic products. — L. M. BLYUMEN (*Glass & Ceramics*, Moscow, 10, NO. 6, 18, 1953). It is argued that glazes on ceramic bodies, e.g. porcelain, may either increase or decrease the strength. An increase in strength is not merely due to the additional strength of the glaze but to a combination of factors. The main factor is the thermal expansion coeff. of the glaze. If the latter is higher than that of the body, then the already existing thermal tensile stresses on the lower surface of a rod subjected to a transverse test will be increased; but if the expansion coeff. of the glaze is lower than that of the body, then the already existing compressive stresses on the lower surface of the rod will partly compensate the tensile stresses caused by the load. The expansion is itself a function of the true coeff. of expansion of the glaze and of its reactivity, wetting-capacity, and structure. Matching the glaze with the body, and the resulting mechanical strength, is indicated by the presence of a more or less well-defined intermediate (contact) layer. The assumption that the similarity of the thermal coeffs. of body and glaze is the only factor determining the adherence of the glaze is rejected as out of date. (6 figs., 1 table.)

Blyumen, L. M.

U S S R

✓ Structure of some titanates in the solid phase. L. M. Blyumen. *Izv. Akad. Nauk Turkm. S.S.R.* 1953, No. 6, 76-8; *Refer. Zhur., Khim.* 1954, No. 34865. — Two CH systems TiO_2 - BeO and ZnO - TiO_2 were studied by thermal, x-ray, and microscopic analysis. The finely ground components were molded into disks of 25 mm. diam. and 2.5 mm. thick. The specimens were then heated in a weakly oxidizing atm. at 1350-1470°. As a result of reaction in the solid state, there are formed chem. compds. that are not always present in the same system crystd. from fusion. In the system BeO - TiO_2 , regardless of the ratio of components in the mixt. under identical conditions of thermal treatment (before sintering) in the solid state, $\text{BeO} \cdot \text{TiO}_2$ having rutile lattice is always formed and in crystn. from a fusion $2\text{BeO} \cdot \text{TiO}_2$ is formed in addn. In the system ZnO - TiO_2 , the compd. $2\text{ZnO} \cdot \text{TiO}_2$ having a spinel lattice is formed. M. Hirsch

BLYUMEN, Lev Markovich; NOSOVA, Z.A., kandidat tekhnicheskikh nauk,
nauchnyy redaktor; CHERKINSKAYA, R.L., redaktor; PANOVA, L.Ya.,
tekhnicheskiy redaktor.

[Glazes] Glazuri. Moskva, Gos. izd-vo lit-ry po stroitel'ny
materialam, 1954. 170 p. (MLRA 8:2)
(Glazes)

Blyumen, L.M.

USSR/Chemical Technology. Chemical Products and their Application.
Glass. Ceramics. Construction Materials.

J-12

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27788.

Author : L.M. Blyumen, V.A. Shmidt.

Inst :

Title : Behavior of Concrete under Conditions of Arid Hot Climate.

Orig Pub: Sb. nauch. rabot po khimii i tekhnol. silikatov M., Promstroyizdat, 1956, 186-197.

Abstract: The technique of laying concrete mixes under the specific conditions of the arid and hot climate of Central Asia was studied. The favorable influence of surface-active substances on the mobility of the concrete mix was established. The use of soapnaphtha for this purpose is not recommended, because it noticeably decreases the strength of mixes. The most efficient additions increasing the strength of concrete (C) 7 to 14 days old are sulfite-alcohol vinasse and calcium chloride; an addition of bentonite

Card : 1/2

-133-

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
p 134 (USSR) 15-57-3-3385

AUTHORS: Blyumen, L. M., Stetsenko, N. N., Zakhar'yants, O. N.

TITLE: Glazed Ceramic Facing Tile Made From Local Raw Material
(Oblitsovochnyye glazurovannyye keramicheskiye plitki
na baze mestnogo syr'ya)

PERIODICAL: Tr. In-ta antiseysmich. str-va AN SSSR, 1956, Nr 1,
pp 74-104

ABSTRACT: Clay and sandy clay deposits near Ashkhabad were tested
for possible use in the manufacture of facing tile.
The chemical compositions of the initial clays are given
in the Table (in percents). Usually ground limestone or
chalk in quantities of 25 to 30 percent is introduced
into the ceramic paste. Local sandy clays rich in car-
bonates are therefore used for their marl-producing
effect (producing leanness). The Kalininskiye gliny (clays)
might be used as the source of supply for the manufac-

Card 1/2

15-57-3-3385

Glazed Ceramic Facing Tile (Cont.)

ture of ceramic tile. This material has been treated with low-melting (easily fusible) glaze, both white and colored, at a firing temperature no greater than 1000°.

Name of clay	SiO ₂	Al ₂ O ₃ +TiO ₂	Fe ₂ O ₃	CaO	MgO	K ₂ O+Na ₂ O	SO ₃	Others	Total
Kalininskiy	63.52	15.38	4.44	4.44	4.53	--	0.85	6.11	99.27
Kelyatinskiy sample 1	61.08	18.56	6.24	0.50	3.54	4.88	0.07	5.07	9.91
Sandy Clay	49.2	12.4	3.9	15.0	4.50	4.00	3.5	--	--

Card 2/2

S. P. Sh.

BLYUMEN, L. M.

"Problems in the Hardening of Mineral Binding and Pressurized Materials"
p. 330

~~"Synthesis and Structure of Polysilicates containing Single and Complex
Heavy Metal Cations" p. 35~~

Transactions of the Fifth Conference on Experimental and Applied Mineralogy
and Petrography, Trudy ... Moscow, Izd-vo AN SSSR, 1956, 210pp.

reprints of reports presented at conf. held in Leningrad, 26-31 Mar 1956. The
purpose of the conf. was to exchange information and coordinate the activities
in the fields of experimental and applied mineralogy and petrography, and to
stress the increasing complexity of practical problems.

BLYUMEN, L.M.; SHUSTER, R.L.

Porous clay filler made from local argillaceous soils. Trudy Inst.
stroil. i stroimat. AN Kazakh SSR 1:3-15 '58. (MIRA 11:6)
(Kazakhstan--Clay) (Soil cement)

ELINZON, Mark Petrovich: BLYUMEN, L.M., kand.tekhn.nauk, nauchnyy
red.: NIKOLAYEVA, N.M., red.isd-va; OSENKO, L.M., tekhn.red.;
HUDAKOVA, N.I., tekhn.red.

[Using slags as aggregates for lightweight concretes] Shlaki
kak zapolnitel' dlia legkikh betonov. Moskva, Gos.isd-vo lit-ry
po stroit., arkhitekt. i stroit.materialam, 1959. 194 p.

(MIRA 13:3)

(Slag) (Lightweight concrete)

BIYUMEN, I.M.; SHUSTER, R.L.

Extension of the temperature range in expanding clay to be used in making clay fillers. Trudy Inst. stroi. i stroimat. AN Kazakh. SSR 2:125-137 '59.

(MIRA 12:10)

(Clay)

Sprittobaya, S. M.

2/072/66/000/03/024/023
2003/2004

5rd All-Union Conference on the Vitreous State

Steklo i keramika, 1960, Br. 3, pp. 43-46 (USSR)

1.80742567

The 3rd All-Union Conference on the Vitreous State was held in Leningrad on the 2nd and 3rd of 1959. It was organized by the Institute of Chemical Physics of the Academy of Sciences of the USSR, the Institute of Chemistry of the Ministry of Silicates Industry of the USSR, Vsesoyuznyy Khimicheskiy Obshchestvo Imeni D. I. Mendeleeva (All-Union Chemical Society Imeni D. I. Mendeleeva) and Sovetskoye Opticheskoye Institut Imeni S. I. Vavilova (State Optical Institute Imeni S. I. Vavilov). More than 100 scientists from 15 different countries participated in the conference. The main topics of the conference were: physical and chemical properties of glasses, their mechanical and technical properties of glasses were delivered. The Conference was opened by Academician A. A. Lebedev.

At the 7th meeting, 6 reports dealt with glasses as ex-
conductors, 9 with the coloring of glasses and the influence of re-
fining and 4 reports with technical properties of glasses. . . .

5. V. P. Kiselev and V. P. Lymerig, coloring of glasses in combination with their simultaneous treatment, *Trudy Vsesoyuznogo Nauchnogo Tsentra*, 1960, No. 1, p. 10.

6. A. Kefeli, "Absorption Spectra of the Glasses," *Trudy Vsesoyuznogo Nauchnogo Tsentra*, 1960, No. 1, p. 10.

7. A. Kefeli, "Composition of boron and aluminum in glasses," *Trudy Vsesoyuznogo Nauchnogo Tsentra*, 1960, No. 1, p. 10.

8. V. P. Kiselev and V. P. Lymerig reported on the change of the spectral absorption of glasses of simple composition under the influence of gamma rays.

9. K. Karapetyan reported on the influence of the structure of glasses on spectral and chemical properties of the fer-ion, V. P. Chiryaev reported on the role of the admixtures and the crystalline state of the glasses in the coloring of glasses.

10. A. Kefeli, "The influence of the admixtures and the crystalline state of the glasses in the coloring of quartz glasses by gamma radiation."

W. E. Blum and R. L. Shuster reported on the physicochemical nature of pore formation in silicate melts (fused glass, ceramic). V. V. Ierusalyns reported on physico-chemical investigations of the influence of refractory oxides in a state of equilibrium. I. V. Ponomarev, the importance of the vitreous phase in the formation of the crystalline body and the cement clinker. V. A. Frenkel reported on the physico-

Case 6/8

mechanical and chemical properties of the filling of glass and metal. The data obtained make it possible to obtain fairly reliable estimates of the properties of glasses. K. V. Ierushal'skiy, A. A. Rastvorov, and E. K. Dubrovskiy have made comprehensive reports. A. A. Apuzin reported on the fundamental structural parameters which determine the properties of the fundamental glasses. A. V. Gladkov, V. A. Zakhobelskiy, V. V. Tarasov reported on the research results of the polymeric structure of inorganic glasses. A. A. Zakharenko reported on peculiarities of the expansion of oxides of silicon glasses. V. G. Shvartskiy reported on the subject: "The structure of glasses of the boron group and their physico-chemical properties." A. A. Zakharenko reported on the physico-chemical properties of amorphous phosphorus. N. A. Smidat reported on the dependence of the properties of alkali silicate glasses on the composition. E. M. Shchegoleva reported on "Investigation of the dependence of the Optical Properties of Phosphate Glasses on the Composition". A. I. Yakhind reported on the subject: "The Periodic System and the Mechanical Properties of Glasses". E. E. Malozemova reported on "Mechanical Properties of Glass Fibers". G. V. Zakharenko, A. E. Zakharenko, and V. A. Zakhobelskiy reported on the mechanical properties of alkali silicate glasses in the amorphous interval and on their structure. I. A. Zakharenko reported on the elastic properties of glasses and on the influence of the composition of the glasses on their mechanical properties.

Case 7/8

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BLYUMEN, L.M., kand.khim.nauk

Selecting clays for making keramzit gravel. Stroi. mat. 6 no.11:32-
34 N '60. (MIRA 13:11)

(Building materials)

BLIUMEN, L. M.

Physical and chemical factors in the expansion of clay in
making koranzit. Stek. i ker. 17 no. 2:32-36 F '60.
(MIRA 13:6)

(Clay)

KOPEYKIN, A.A.; BLYUMEN, L.M.

Glazed facing tiles made of local low-melting clays. Stok.
1 ker. 17 no.9:6-10 S '60. (MIRA 13:9)
(Tiles)

BLYUMEN, L.M., kand.khimicheskikh nauk; VORONOV, A.G., kand.tekhn.nauk

Effect of the mineral composition of sand and its level of dispersion on the strength of silicate products hardened by means of moisture and heat. Stroi. mat. 8 no.4:31-34 Ap '62.
(Sand-lime products)

BLYUMEN, I.M.; BUTT, Yu.M.; VOROB'YEV, Kh.S.; KRUPIN, A.A.

Formation and properties of lime-belite binders. Stroi. mat. 11
no.8:29-31 Ag '65. (MIRA 18:9)

BLYUMEN, V., inzh.; ZONNENBERG, M., inzh.; PANCHENKO, O., inzh.

The simplest method for eliminating the air gap between
vanes and the working part of the cylinder of the "Kolhospyi"
press. Sil'.bud. 7 no.12:18 D '57. (MIRA 13:5)
(Brickmaking machinery)

FEDOSEYEV, A.D., doktor tekhn. nauk, prof., red.; BARZAKOVSKIY, V.P.,
doktor khim. nauk, red.; GREBENSHCHIKOV, R.G., kand. khim. nauk,
red.; BLYUMENAU, D.I., red.; SEMENOVA, A.V., tekhn. red.

[Chemistry and use of silicates] Khimiia i prakticheskoe prime-
nenie silikatov. Pod red. A.D.Fedoseeva, V.P.Barzakovskogo, R.G.
Grebenshchikova. Leningrad, TSentr. biuro tekhn. informatsii, 1960.
238 p. (MIRA 14:9)

(Silicates)

ANTONOV, V.Ya., kand.tekhn.nauk; BEZZUBOV, N.D., kand.tekhn.nauk; BELOKO-
 PYTOV, I.Ye., kand.sel'skokhoz.nauk; BLYUMENBERG, Y.Y., kand.tekhn.
 nauk; BOGDANOV, N.N., kand.tekhn.nauk; BRAGIN, N.A., inzh.; VASIL'YEV,
 Yu.K., inzh.; VINOGRADOV, V.A., inzh.; ROZENBERG, B.I., inzh.; GOR-
 GIDZHANYAN, S.A., kand.tekhn.nauk; ZIZA, A.A., kand.sel'skokhoz.nauk;
 KALABUKHOV, M.V., agronom-meliorator; KOLOTUSHKIN, V.I., inzh.; KORCHU-
 NOV, S.S., kand.tekhn.nauk; KRYUKOV, M.N., dotsent; VAVULO, V.A., inzh.;
 HAUMOV, D.K., kand.tekhn.nauk; OLENIN, A.S., inzh.; PROVORKIN, A.S.,
 inzh.; PROKHOROV, N.I., dotsent; RASKIN, G.I., inzh.; SAVENKO, I.V.,
 inzh.; SERGEYEV, B.F., kand.tekhn.nauk; STOYLIK, M.A., inzh.; SUKHA-
 NOV, M.A., inzh.; TOPOL'NITSKIY, N.M., kand.tekhn.nauk; TIURENOV, S.N.,
 doktor biol.nauk, prof.; FATCHIKHINA, O.Ye., kand.sel'skokhoz.nauk;
 TSVETKOV, B.I., inzh.; CHUBAROV, N.D., inzh.; MANDEL'BAUM, A.I., inzh.;

(Continued on next card)

ANTONOV, V.Ya.---(continued) Card 2.

YARTSEV, A.K.; SAMSONOV, N.N., inzh., glavnyy red.; BERSHADSKIY, I.S., inzh., nauchnyy red.; VARENTSOV, V.S., kand.tekhn.nauk, nauchnyy red.; VYSOTSKIY, K.P., kand.tekhn.nauk, nauchnyy red.; GORINSHTEYN, L.L., kand.tekhn.nauk, nauchnyy red.; GORYACHKIN, V.G., prof., nauchnyy red.; YEFIMOV, P.N., kand.tekhn.nauk, nauchnyy red.; KUZEMAN, G.I., kand.tekhn.nauk, nauchnyy red.; KULAKOV, N.N., kand.tekhn.nauk, nauchnyy red.; KUTAIS, L.I., prof., doktor tekhn.nauk, nauchnyy red.; MIRKIN, M.A., inzh., nauchnyy red.; SEMENSKIY, Ye.P., kand.tekhn.nauk, nauchnyy red.; SOKOLOV, A.A., kand.tekhn.nauk, nauchnyy red.; KHAZANOV, Ya.N., dotsent, nauchnyy red.; KHALUGO, A.K., inzh., nauchnyy red.; TSUPROV, S.A., dotsent, nauchnyy red.; SHEFYNBOK, G.D., inzh., nauchnyy red.; KOLOTUSHKIN, V.I., red.; SKVORTSOV, I.M., tekhn.red.

[Reference book on peat] Spravochnik po torfu. Moskva, Gos.energ. izd-vo, 1954. 728 p. (MIRA 13:7)

1. Chlen-korrespondent AN BSSR (for Goryachkin).
(Peat—Handbooks, manuals, etc.)

Blyumenberg, V.V.

ANDREYEV, A.B.; ANTONOV, A.I.; ARAPOV, P.P.; BARMASH, A.I.; BEDNYAKOVA, A.B.; BENIN, G.S.; BERESNEVICH, V.V.; BERNSTEIN, S.A.; BITUTSKOV, V.I.; BLYUMENBERG, V.V.; BOMCH-BRUYEVICH, M.D.; BORMOTOV, A.D.; BULGAROV, N.I.; VEKSLER, B.A.; GAVRILENKO, I.V.; GENDLER, Ye.S., [deceased]; GERLIVANOV, N.A., [deceased]; GIBSHMAN, Ye.Ye.; GOLDOVSKIY, Ye.M.; GOEBUNOV, P.P.; GORYALNOV, F.A.; GRINBERG, B.G.; GRUNER, V.S.; DANOVSIIY, N.F.; DZEVUL'SKIY, V.M., [deceased]; DREMAYLO, P.G.; DYBETS, S.G.; D'YACHENKO, P.F.; DYURNBAUM, N.S., [deceased]; YEGORCHENKO, B.F., [deceased]; YEL'YASHKEVICH, S.A.; ZHEREBOV, L.P.; ZAVEL'SKIY, A.S.; ZAVEL'SKIY, F.S.; IVANOVSKIY, S.R.; ITKIN, I.M.; KAZHDAN, A.Ya.; KAZHINSKIY, B.B.; KAPLINSKIY, S.V.; KASATKIN, F.S.; KATSAUROV, I.M.; KITAYGORODSKIY, I.I.; KOLLESNIKOV, I.F.; KOLOSOV, V.A.; KOMAROV, N.S.; KOTOV, B.I.; LINDE, V.V.; LEBEDEV, H.V.; LEVITSKIY, N.I.; LOKSHIN, Ya.Yu.; LUTTSAU, V.K.; MANNERBERGER, A.A.; MIKHAYLOV, V.A.; MIKHAYLOV, N.M.; MURAV'YEV, I.M.; NYDEL'MAN, G.B.; PAVLYSHKOV, L.S.; POLUYANOV, V.A.; POLYAKOV, Ye.S.; POPOV, V.V.; POPOV, N.I.; RAKHLIN, I.Ye.; RZHEVSKIY, V.V.; ROZENBERG, G.V.; ROZENTRETER, B.A.; ROKOTYAN, Ye.S.; RUKAVISHNIKOV, V.I.; RUTOVSKIY, B.M., [deceased]; RYVKIN, P.M.; SMIRNOV, A.P.; STEPANOV, G.Yu.; STEPANOV, Yu.A.; TARASOV, L.Ya.; TOKAREV, L.I.; USPASSKIY, P.P.; FEDOROV, A.V.; FERRE, N.B.; FRENKEL', N.Z.; KHEYFETS, S.Ya.; KHLOPIN, M.I.; KHODOT, V.V.; SHAMSHUR, V.I.; SHAPIRO, A.Ye.; SHATSOV, N.I.; SHISHKINA, N.M.; SHOR, E.R.; SHPICHENETSKIY, Ye.S.; SHPRINK, B.B.; SHTERLING, S.Z.; SHUTYY, L.R.; SHUKHAL'TER, L. Ya.; ERVAYS, A.V.;

(Continued on next card)

ANDREYEV, A.B. (continued) Card 2.

YAKOVLEV, A.V.; ANDREYEV, Ye.S., retsenzent, redaktor; BERKEN-
 GHYM, B.M., retsenzent, redaktor; BERMAN, L.D., retsenzent, redaktor;
 BOLTINSKIY, V.N., retsenzent, redaktor; BONCH-BRUYEVICH, V.L.,
 retsenzent, redaktor; VELLER, M.A., retsenzent, redaktor; VINOGRADOV,
 A.V., retsenzent, redaktor; GUDTSOV, N.T., retsenzent, redaktor;
 DEGTYAREV, I.L., retsenzent, redaktor; DEM'YANYUK, F.S., retsenzent;
 redaktor; DOBROSMYSLOV, I.N., retsenzent, redaktor; YELANCHIK, G.M.
 retsenzent, redaktor; ZHEMOCHKIN, D.N., retsenzent, redaktor;
 SHURAVCHENKO, A.N., retsenzent, redaktor; ZLODEYEV, G.A., retsenzent,
 redaktor; KAPLUNOV, R.P., retsenzent, redaktor; KUSAKOV, M.M.,
 retsenzent, redaktor; LEVINSON, L.Ye., [deceased] retsenzent, redaktor;
 MALOV, N.N., retsenzent, redaktor; MARKUS, V.A. retsenzent, redaktor;
 METELITSYN, I.I., retsenzent, redaktor; MIKHAYLOV, S.M., retsenzent;
 redaktor; OLIVETSKIY, B.A., retsenzent, redaktor; PAVLOV, B.A.,
 retsenzent, redaktor; PANYUKOV, M.P., retsenzent, redaktor; PLAKSIN,
 I.N., retsenzent, redaktor; RAKOV, K.A. retsenzent, redaktor;
 RZHAVINSKIY, V.V., retsenzent, redaktor; RINBERG, A.M., retsenzent;
 redaktor; ROGOVIN, N. Ye., retsenzent, redaktor; HUDENKO, K.G.,
 retsenzent, redaktor; RUTOVSKIY, B.N., [deceased] retsenzent,
 redaktor; RYZHOV, P.A., retsenzent, redaktor; SANDOMIRSKIY, V.B.,
 retsenzent, redaktor; SKRAMTAYEV, B.G., retsenzent, redaktor;
 SOKOV, V.S., retsenzent, redaktor; SOKOLOV, N.S., retsenzent,
 redaktor; SPIVAKOVSKIY, A.O., retsenzent, redaktor; STRAMENTOV, A.Ye.,
 retsenzent, redaktor; STRELITSKIY, N.S., retsenzent, redaktor;
 (Continued on next card)

ANDREYEV, A.V., (continued) Card 3.

TRET'YAKOV, A.P., retsenzent, redaktor; FAYKMAN, Ye.M., retsenzent, redaktor; KHACHATYROV, T.S., retsenzent, redaktor; CHERNOV, H.V., retsenzent, redaktor; SHERGIN, A.P., retsenzent, redaktor; SHESTOPAL, V.M., retsenzent, redaktor; SHESHKO, Ye.F., retsenzent, redaktor; SHCHAPOV, N.M., retsenzent, redaktor; YAKOBSON, M.O., retsenzent, redaktor; STEPANOV, Yu.A., Professor, redaktor; DEM'YANYUK, F.S., professor, redaktor; ZNAMENSKIY, A.A., inzhener, redaktor; PLAKSIN, I.N., redaktor; RUTOVSKIY, B.N. [deceased] doktor khimicheskikh nauk, professor, redaktor; SHUKHGAL'TER, L. Ya, kandidat tekhnicheskikh nauk, dotsent, redaktor; BRESTINA, B.S., redaktor; ZNAMENSKIY, A.A., redaktor.

(Continued on next card)

ANDREYEV, A.V. (continued) Card 4.

[Concise polytechnical dictionary] Kratkii politekhnicheskii slovar'. Redaktsionnyi sovet; IU.A.Stepanov i dr. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1955. 1136 p. (MLRA 8:12)

1. Chlen-korrespondent AN SSSR (for Plaksin)
(Technology--Dictionaries)

ACCESSION NR: AP4013332

S/0020/64/154/003/0631/0633

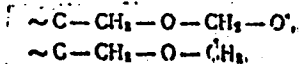
AUTHOR: Blyumenfel'd, A. B.; Neyman, M. B.; Kovarskaya, B. M.

TITLE: Thermal degradation of polyformaldehyde

SOURCE: AN SSSR. Doklady*, v. 154, no. 3, 1964, 631-633

TOPIC TAGS: polyformaldehyde, thermal degradation, decomposition, free radical mechanism, IR spectrum, mass spectrometry, chromatography

ABSTRACT: A study was made to determine if either of the following free radicals were involved in the thermal decomposition of polyformaldehyde:



Formaldehyde was separated at 300C from the thermal decomposition products and the remaining products were analyzed chromatographically by their IR spectra and on the mass spectrometer. Methanol, methyl

Card 1/2

ACCESSION NR: AP4013332

formate, water, hydrogen, methane, and products containing the ether linkages -C-O-C-O-C- were found. Since no formic acid was detected, free radical (1) is not involved in the reaction. The thermal destruction of polyformaldehyde is a complex process which includes the formation of free radical (2). Orig. art. has: 2 figures and 7 equations.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut plasticheskikh mass (State Scientific Research Plastics Institute)

SUBMITTED: 22Jul63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH

NO REF SOV: 005

OTHER: 002

Card 2/2

BLYUMENFEL'D, A.O.

Thermophilic algae of hot springs as a therapeutic factor. Vop. kur.,
fizioter. i lech. fiz. kul't. 25 no.2:148-154 Mr-Apr '60.

(MIRA 13:9)

1. Glavnyy bal'neolog Vsesoyuznyy kontory "Soyuzgeokaptazhainvod"
(direktor I.I. Kobozev).

(KAMCHATKA—SPRINGS)

(ALGAE—THERAPEUTIC USE)

BLYUMENFEL'D, Aleksandr Osipovich, kand. med. nauk; SEREKKEY, S., red.
[deceased]; KUZNETSOVA, K., tekhn. red.

[Health resorts of Tuva] Kurortnye bogatstva Tuvy. Kyzyl, Tuvinskoe
knizhnoe izd-vo, 1960. 60 p. (MIRA 14:10)
(TUVA AUTONOMOUS PROVINCE--HEALTH RESORTS, WATERING PLACES, ETC.)

BLYUMENFEL'D, D. N.

"On the Existence and Uniqueness of Limit Distributions for Systems of Stochastic Differential Equations." Cand Phys-Math Sci, Leningrad Order of Lenin State U imeni A. A. Zhdanov, Leningrad, 1955. (KL, No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

13

CD

137 AND 138 GROUPS

PROCESSES AND PROPERTIES INDEX

Ionic character of bonds and absorption spectra. 1.
A. Blumenfeld. *Compt. rend. acad. sci. U.R.S.S.* 52,
307-9(1948)(in English).—An attempt to establish the
quant. relation between the ionic character of bonds and
the energy difference between the ground and excited
level in the case of resonance of the homopolar and ionic
states. Calcd. values for HCl, HBr, HI, C halides
show that with an increase in resonance between ionic
and homopolar structures, the absorption spectrum shifts
into the short wave lengths. M. McMahon

ASD-51A METALLURGICAL LITERATURE CLASSIFICATION

137 AND 138 GROUPS

PROCESSES AND PROPERTIES INDEX

BLYUMENFEL'D, L. A.

PA 28187

USSR/Physics

Jul/Aug 1947

Spectra, Absorption

Naphthalene - Derivatives

"Electron Levels of Naphthalene Molecules and the Absorption Spectra of Naphthalene and Its Derivatives,"
L. A. Blyumenfel'd, 4 pp

"Iz Ak Nauk, Ser Fiz" Vol XI, No 4

Sklar in 1937 was the first to calculate and interpret the ultraviolet absorption spectrum of a series of complex molecules, and connected the energy of the absorbed quantum of light with the difference between the basic and generated levels of molecules. As a result he obtained resonance among the regular structures. The author develops the subject and adds the results of his experiments. Submitted at the Physics and Chemistry Institute imeni Karpov.

28787

BLYUMENFELD, L. A.

PA 18T103

USSR/Chemistry - Naphthalene
Chemistry - Spectra

May 1947

"The Electronic Levels and Absorption Spectrum of Naphthalene," L. A. Blyumenfeld, Physical Chemistry Institute, Imeni Karpov, Moscow, 9 pp.

"Zhur Fiz Khim" Vol XXI, No 5

Experiments resulted in discovery of weights for different stimulations, interpretation of the absorption spectrum of naphthalene and its monoform and an accounting of electronic energy levels when structures with two and three extended links were disregarded.
Published 25 Nov 1946

18T103